

WE CLAIM:

1. A method for processing medical information, comprising:
receiving securely on a server computer via a communications network one or
more digital images created from a paper medical information template from an
5 encounter with a patient;
processing the one or more digital images to extract patient encounter information
included in the digital images;
generating automatically one or more medical codes from the extracted patient
encounter information; and
10 utilizing in real-time on one or more electronic templates the one or more medical
codes generated from the extracted patient encounter information, wherein the one or
more electronic templates are displayed on a graphical user interface (GUI) or the one or
more electronic templates are used to produce additional medical information documents
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2. The method of Claim 1 further comprising a computer readable medium
having stored therein instructions for causing a processor to execute the steps of the
method.

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3. The method of Claim 1 further comprising:

generating an electronic invoice in real-time using the one or more medical codes
calculated from the extracted patient encounter information, wherein the electronic
5 invoice includes a fee for the medical services provided during the patient encounter; and
utilizing in real-time the generated electronic invoice.

4. The method of Claim 1 further comprising:

generating an electronic medical record in real-time using the one or more
10 medical codes calculated from the extracted patient encounter information and other
information extracted from the patient encounter information; and
utilizing in real-time the generated electronic medical record.

5. The method of Claim 1 wherein the one or more generated medical codes

15 include one or more of Evaluation and Management codes (“E/Ms”) codes, Current
Procedural Terminology (“CPTs”) codes, Health Care Financing Administration
Common Procedural Coding System (“HCPCS”) codes, International Classification of
Diseases 9th Edition Clinical Modification (“ICD-9”) codes or International Classification
of Diseases 10th Edition Clinical Modification (“ICD-10”) codes.

6. The method of Claim 1 wherein the processing step includes:
collecting historical information, physical examination information complexity
information, patient status information, patient demographic information, diagnosis
information, clinical procedure information and supply information from the extracted
5 patient encounter information.

7. The method of Claim 6 wherein the collecting step includes:
generating automatically one or more medical codes using historical, physical
complexity of medical decision making information, patient status information, patient
10 demographic information, diagnosis information, clinical procedure information,
treatment information and supply information collected from the extracted patient
encounter information.

8. The method of Claim 1 further comprising verifying in real-time the extracted
15 patient encounter information included in the digital images.

9. The method of Claim 1 wherein the paper medical information template
includes a plurality of check-boxes specifically selected for a specific type of medical
practice, wherein processing the plurality of check-boxes generates an appropriate
20 number and type of medical codes for the specific type of medical practice.

10. The method of Claim 1 wherein the one or more electronic templates include one or more of an electronic invoice template, and electronic medical record template, a current compliant template, a diagnosis template, a nurse template, a review template, or provider template.

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11. The method of Claim 1 wherein the one or more generated medical codes include a one or more medical codes specifically generated for a new patient or one or more medical codes specifically generated for an existing patient.

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12. The method of Claim 1 wherein the processing step includes:
determining from the extracted patient encounter information that an audio provider diction is pending; and
generating a first set of electronic text from the extracted patient encounter information for the pending audio provider dictation in a pre-determined location on an
15 electronic medical record.

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13. The method of Claim 12 further comprising:
generating a second set of electronic text transcribed from the pending audio provider dictation to the pre-determined location on the electronic medical record.

14. The method of Claim 1 wherein the generating step includes:

creating a coding summary of the one or more medical codes generated from the
extracted patient encounter information; and

attaching the created coding summary to the one or more digital images, wherein

5 the coding summary can be used to verify that the proper medical codes were generated
from the extracted patient encounter information.

15. A method for processing medical information, comprising:
receiving securely on a server computer via a communications network one or more digital images created from a paper medical information template from an encounter with a patient;

5 processing the one or more digital images to extract patient encounter information included in the digital images;

collecting historical information, physical examination information complexity of medical decision making information, patient status information, patient demographic information, diagnosis information, clinical procedure information and supply

10 information from the extracted patient encounter information;

generating automatically one or more medical codes using the collected information;

generating an electronic invoice template and an electronic medical record template using the one or more generated medical codes and the collected information;

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utilizing in real-time the generated electronic invoice template or the electronic medical record template.

16. The method of Claim 15 further comprising a computer readable medium
20 having stored therein instructions for causing a processor to execute the steps of the method.

17. The method of Claim 15 wherein the step of generating automatically one or more medical codes includes:

determining one or more history values from the collected historical information;

determining one or more physical examination values from the collected physical

5 examination information;

determining one or more complexity values from the collected complexity information;

determining one or more patient status values from the patient status information extracted from the patient encounter information;

10 determining one or more patient demographic values from the patient demographic information extracted from the patient encounter information;

determining one or more diagnosis values from the diagnosis information extracted from the patient encounter information;

15 determining one or more clinical procedure values from the clinical procedure information extracted from the patient encounter information;

determining one or more supply values from the supply information extracted from the patient encounter information; and

generating one or more medical codes using the determined values.

20 18. The method of Claim 15 further comprising verifying in real-time the extracted patient encounter information included in the digital images.

19. The method of Claim 15 wherein the one or more medical codes include one or more of Evaluation and Management codes (“E/Ms”) codes, Current Procedural Terminology (“CPTs”) codes, Health Care Financing Administration Common Procedural Coding System (“HCPCS”) codes International Classification of Diseases 9th Edition Clinical Modification (“ICD-9”) codes, or International Classification of Diseases 10th Edition Clinical Modification (“ICD-10”) codes.
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20. A method for processing medical information, comprising:

receiving securely on a server computer via a communications network electronic data collected from an electronic medical information template on an electronic device for an encounter with a patient;

5 processing the electronic data to extract patient encounter information included in the electronic data;

generating automatically one or more medical codes from the extracted patient encounter information; and

utilizing in real-time on one or more electronic templates the one or more medical
10 codes generated from the extracted patient encounter information, wherein the one or more electronic templates are displayed in real-time on a graphical user interface (GUI) or the one or more electronic templates are used in real-time to produce additional medical information documents.

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21. The method of Claim 20 further comprising a computer readable medium having stored therein instructions for causing a processor to execute the steps of the method.

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22. The method of Claim 20 further comprising:

generating an electronic invoice in real-time using the one or more medical codes calculated from the extracted patient encounter information, wherein the electronic invoice includes a fee for the medical services provided during the patient encounter; and
utilizing in real-time the generated electronic invoice by displaying the generated electronic invoice via a graphical user interface (“GUI”) or via another data processing system.

23. The method of Claim 20 further comprising:

generating an electronic medical record in real-time using the one or more medical codes calculated from the extracted patient encounter information and other information extracted from the patient encounter information; and
displaying in real-time the generated electronic medical record via a graphical user interface (“GUI”).

24. The method of Claim 20 wherein the one or more medical codes include one or more of Evaluation and Management codes (“E/Ms”) codes, Current Procedural Terminology (“CPTs”) codes, Health Care Financing Administration Common Procedural Coding System (“HCPCS”) codes or International Classification of Diseases 9th Edition Clinical Modification (“ICD-9”) codes , or International Classification of Diseases 10th Edition Clinical Modification (“ICD-10”) codes.

25. The method of Claim 20 wherein the processing step includes:
collecting historical information, physical examination information complexity
information, patient status information, patient demographic information diagnostic
5 information, treatment information, clinical procedure information and supply
information from the extracted patient encounter information.

26. The method of Claim 25 wherein the generating step includes:
generating automatically one or more medical codes using the information
10 collected from the extracted patient encounter information.

27. The method of Claim 20 wherein the one or more electronic templates
include one or more of an electronic invoice template, and electronic medical record
template, a current compliant template, a diagnosis template, a nurse template, a review
15 template, or provider template.

28. A method for processing medical information, comprising:

generating automatically one or more medical codes from patient encounter information extracted from one or more digital images created from a paper medical information template for an encounter with a patient;

5 generating automatically one or more electronic templates using the one or more generated medical codes and other information extracted from the extracted patient encounter information; and

displaying in real-time the one or more electronic templates via a graphical user interface (“GUI”) including the one or more medical codes calculated from the extracted
10 patient encounter information and other information extracted from the extracted patient encounter information.

29. The method of Claim 28 further comprising a computer readable medium

having stored therein instructions for causing a processor to execute the steps of the
15 method.

30. The method of Claim 28 wherein the one or more medical codes include one or more of Evaluation and Management codes (“E/Ms”) codes, Current Procedural Terminology (“CPTs”) codes, Health Care Financing Administration Common
5 Procedural Coding System (“HCPCS”) codes or International Classification of Diseases 9th Edition Clinical Modification (“ICD-9”) codes or International Classification of Diseases 10th Edition Clinical Modification (“ICD-10”) codes.

10 31. The method of Claim 28 wherein the one or more electronic templates include one or more of an electronic invoice template, and electronic medical record template, a current compliant template, a diagnosis template, a nurse template, a review template, or provider template.

32. The method of Claim 28 wherein the step of generating automatically one or more medical codes includes:

5 determining one or more history values from historical information extracted from the patient encounter information;

determining one or more physical examination values from physical examination information extracted from the patient encounter information;

determining one or more complexity values from complexity information extracted from the patient encounter information;

10 determining one or more patient status values from the patient status information extracted from the patient encounter information;

determining one or more patient demographic values from the patient demographic information extracted from the patient encounter information;

15 determining one or more diagnosis values from the diagnosis information extracted from the patient encounter information;

determining one or more clinical procedure values from the clinical procedure information extracted from the patient encounter information;

determining one or more supply values from the supply information extracted from the patient encounter information; and

20 generating one or more medical codes using the determined values.

33. A medical information processing system, comprising in combination:

a plurality of paper medical information templates including a plurality of selected check boxes to fill in patient encounter information, wherein the plurality of check boxes are specifically selected for a specific type of medical practice and are used to directly generate one or more medical codes of an appropriate type and number when the plurality of paper medical information templates are processed;

a plurality of electronic medical information templates including a plurality of electronic check boxes to fill in patient encounter information, wherein the plurality of electronic check boxes are specifically selected for a specific type of medical practice and used to directly generate one or more medical codes of an appropriate type and number when the plurality of electronic medical information templates are processed;

a medical information template reader application for processing the plurality of paper and electronic medical information templates to extract patient encounter information and for verifying extracted patient encounter information;

a medical code processing engine for generating one or more medical codes from patient encounter information extracted by the medical information template reader application, for generating one or more electronic templates and for displaying the one or more generated medical codes and other information extracted by the medical information template reader application;

a medical data presentation application for displaying in real-time one or more medical codes generated by the medical code processing engine, for

displaying in real-time other patient encounter information extracted by the
medical information template reader application, for displaying in real-time the
one or more electronic templates generated by the medical code processing engine
and for displaying in real-time patient information extracted by the medical
5 information template reader application to be verified and for utilizing in real-
time the one or more medical codes generated by the medical code processing
engine for creating additional medical information documents from the medical
information processing system or via an external data processing system; and
an audio dictation interface for securely accepting and storing audio
10 dictation information from providers that is associated with other information
extracted from patient encounters, for securely retrieving a plurality of stored
audio dictation information that is transcribed into electronic information, for
securely storing transcribed electronic information, and for associating the
transcribed electronic information with one or more electronic templates created
15 for the patient encounters.

34. The method of Claim 33 wherein the one or more medical codes include one or more of Evaluation and Management codes (“E/Ms”) codes, Current Procedural Terminology (“CPTs”) codes, Health Care Financing Administration Common
5 Procedural Coding System (“HCPCS”) codes International Classification of Diseases 9th Edition Clinical Modification (“ICD-9”) codes or International Classification of Diseases 10th Edition Clinical Modification (“ICD-10”) codes.

35. The system of Claim 33 wherein the one or more electronic templates include
10 one or more of an electronic invoice template, and electronic medical record template, a current compliant template, a diagnosis template, a nurse template, a review template, or provider template.